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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,623	03/21/2000	KLAUS-LEO WILBUER	SWR-0004	2649

23413 7590 12/16/2002

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EXAMINER
CHAMBERS, TROY

ART UNIT	PAPER NUMBER
3641	

DATE MAILED: 12/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/446,623	WILBUER ET AL.	
	Examiner	Art Unit	
	Troy Chambers	3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. In view of the Appeal filed on 24 September 2002, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. With respect to Claim 1, Applicant recites the phrase "at least from time to time." It is unclear what "time to time" means since it is not defined in the specification. Therefore, it is impossible to determine when a relative movement is applied to the

solution. The Applicant argues in his Response to Final Action (paper #13, filed 20 June 2002) that the Wang prior art document is not applicable because 'The stirrers 16 are then stopped to allow the particles to settle onto the surface of the tube 18 while electroplating proceeds....' (pg. 3, para. 1). Applicant further argues "In such a case, particles of boron carbide 'settle out' of the liquid phase of the solution after the dispersion bath equilibrates and movement of the solution stops". But without a clear description of the term "at least from time to time" it is unclear when the relative movement is supposed to take place.

4. Claims 1 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The meaning of the phrase "provided on a surface predetermined for it" is unclear. Not only is the phrase indefinite but it is not clear what "it" refers to.

5. With respect to claim 13, Applicant attempts to create a method claim by reciting the limitation "producing a coating for the absorption of neutrons." However, as stated above, there are no further positive steps to indicate how the applicant "produces" a coating for the absorption of neutrons. This is the end result of applicant's invention and is more appropriately placed in the preamble with proper product- by-process limitations set forth thereafter.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4238299 issued to Wang in view of EPO Publication EP 55679 issued to Baburek. Wang discloses a process for coating a shielding element with a boron copper layer. However, Wang does not disclose expressly that his method is applicable to deposition boron nickel particles.

Baburek discloses a method for coating a shielding element with a boron-nickel layer (page 3, ll. 10-12 and 34-36).

3. With respect to claims 1 and 13, it would have been obvious to one having ordinary skill in the art to apply the coating method of Wang using the materials disclosed in Baburek. The suggestion/motivation for doing so would have been to agitate the copper boron electrolyte solution thereby achieving an even distribution (Wang, col. 3, ll. 19-40).

4. With respect to claim 2, see Wang, col. 4, ll. 48-59.

5. With respect to claim 3, see Wang, col. 4, ll. 12-17.

6. With respect to claim 4, see Wang, col. 3, ll. 19-22

7. With respect to claim 5, one having ordinary skill in the art would find it obvious to remove the carbon element from the boron carbon compound. Removing the carbon element would eliminate the abrasive properties of the boron carbon compound but would physically allow more boron to be embedded in another metal as a result of the increase in molecular spacing.

8. With respect to claim 6, Baburek discloses a method for coating a shielding element with a bororn-nickel layer using a plasma torch (Abst.).

9. With respect to claim 7, Wang discloses electrolytic boron carbide deposition (Abst.).

10. With respect to claim 8, the combined disclosures of Wang and Baburek anticipate claim 1 and therefore would inherently obtain a coating of the thickness claimed by the Applicant.

11. With respect to claims 9, 10, and 13, see Wang, col. 1, ll. 20-22.

12. With respect to claim 11, see Wang, col. 2, ll. 19-22.

13. With respect to claim 12, see Wang, col. 2, ll. 58-61.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is (703) 308-5870. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached at (703) 306-4198.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-4177. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4195.

MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER